Ontario

Ministry of Northern Development and Mines

Mines and Minerals Division

GEOLOGICAL DATA INVENTORY FOLIO

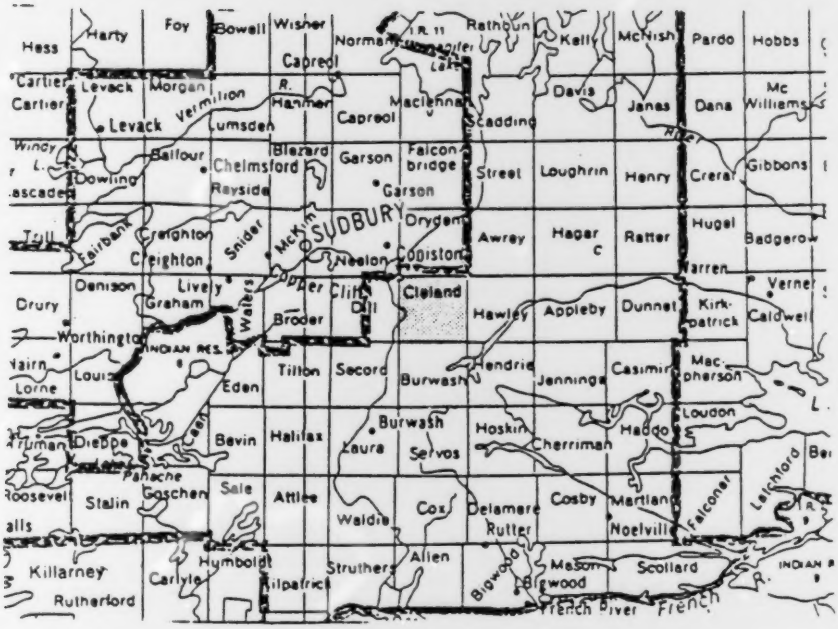
GDIF 543

CLELAND TOWNSHIP

Sudbury Mining Division

41 I/7

Compiled by the staff of
the Resident Geologist's Office
SUDBURY



LOCATION MAP

CANADA ONTARIO
Mineral Development Exploration Minerals

This project is part of the five year Canada–Ontario 1985 Mineral Development Agreement (COMDA), a subsidiary agreement to the Economic and Regional Development Agreement (ERDA) signed by the governments of Canada and Ontario.

90-02999/

Mining Claim Map Number M.722

This project was funded under the Canada Ontario Mineral Development Agreement (COMDA), 1985-1990.

STATEMENT: This inventory is unedited. Discrepancies may occur for which the Ontario Ministry of Northern Development and Mines does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Ontario Geological Survey 1990,
Cleland Township, Geological Data Inventory Folio
compiled by the staff of the Resident Geologist's Office, Sudbury

Original Compilation by: Jerome, Lucille, May 1989

Date	Page(s) Revised	Revised by
*		

Date	Page(s) Revised	Revised by

CLELAND TOWNSHIP

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ACCOMPANYING MAPS (see map legends on outside back cover).

A. Files Index Map (s) ..... Map A-1

B. Exploration Data Map (s) ..... Map B-1

ABBREVIATIONS LIST

A.F.R.O.	Assessment Files Research Office (Toronto)
Ann. Rept. (A.R.)	Annual Report
A.R.I.P	Aggregate Resources Inventory Paper
Bull	Bulletin
C.I.M.M.	Canadian Institute of Mining and Metallurgy
C.J.E.S.	Canadian Journal of Earth Sciences
C.M.J.	Canadian Mining Journal
Econ. Geol.	Economic Geology
E.M.R.	Department of Energy, Mines and Resources
E.P.B.	Earth Physics Branch
G.A.C.	Geological Association of Canada
GC	Geological Circular
GDIF	Geological Data Inventory Folio
Geol.	Geology
Geol. Soc. Amer. Bull.	Geological Society of American Bulletin
GR	Geoscience (Geological) Report
GSC	Geological Survey of Canada
I.L.S.G.	Institute on Lake Superior Geology
IMR	Industrial Mineral Report
I.O.C.	Report of the Iron Ore Committee (1923)
Jour. (or J)	Journal
MDC	Mineral Deposit Circular
M.D.I. (R)	Mineral Deposit Inventory (Record)
Mem	Memoir
MNDM	Ministry of Northern Development and Mines
MNR	Ministry of Natural Resources
MP	Miscellaneous Paper
MRC	Mineral Resources Circular
N.M.I.	National Mineral Inventory
NOEGTS	Northern Ontario Engineering Geology Terrain Study
NTS	National Topographic System
O.B.M.	Ontario Bureau of Mines
O.D.L.F.	Ontario Department of Lands and Forests
ODM	Ontario Department of Mines/Ontario Division of Mines
ODMNA	Ontario Department of Mines and Northern Affairs
OFR	Open File Report
OGS	Ontario Geological Survey
P.R.	Preliminary Report
Prelim. (or P)	Preliminary
R.C.	Royal Commission on Mineral Resources of Ontario (1890)
S.M.D.R.	Source Mineral Deposit Record
SOEGTS	Southern Ontario Engineering Geology Terrain Study
Sum. Rept.	Summary Report

*

DATA SOURCES CHECK LIST

NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no': if reference data was found, the box is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

	SOURCES OF DATA	Data	Initial
1	Resident Geologist's Office Files	No	L.J.
2	Assessment Files Research Office, Toronto	N.A.	L.J.
3	OGS/ODM General Index ; 9 volumes	Yes	L.J.
4	Catalogue of Airborne Geophysical Surveys (ODM)	No	L.J.
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	No	L.J.
6	ODM Industrial Mineral Reports	Yes	L.J.
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	N.A.	L.J.
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	No	L.J.
9	Newspaper Clippings File	No	L.J.
10	GSC Index to Publications	No	L.J.
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	Yes	L.J.
12	OGS Index Maps	Yes	L.J.
13	Source Mineral Deposit Records (OGS)	Yes	L.J.
14	Author - Subject Articles File	Yes	L.J.
15	ODM/OGS Miscellaneous Papers	No	L.J.
16	ODM Geological Circulars	No	L.J.
17	OGS Study Series	No	L.J.
18	ODM Preliminary Reports	No	L.J.
19	ODM Bulletins	No	L.J.
20	ODM/OGS Open File Reports	Yes	L.J.
21	OGS Northern/Southern Ontario Engineering Geology Terrain Studies	Yes	L.J.
22	OGS Aggregate Resources Inventory Papers	No	L.J.
23	OGS Mineral Potential Maps	Yes	L.J.
24	Drill Core Library Catalogue	N.A.	L.J.
25	Theses on File, Sudbury	No	L.J.

*

MINERAL COMMODITIES REFERENCE LIST

anh ..... Anhydrite
ank ..... Ankerite
ap ..... Apatite
arg ..... Argentite
As ..... Arsenic
asp ..... Arsenopyrite
asb ..... Asbestos
ba ..... Barite
be ..... Beryl
Bi ..... Bismuth
bn ..... Bornite
Cd ..... Cadmium
calc ..... Calcite
carb ..... Carbonate
cc ..... Chalcocite
cp ..... Chalcopyrite
ch ..... Chert
clay ..... Clay
Co ..... Cobalt
cob ..... Cobaltite
Cu ..... Copper
cor ..... Corundum
dol ..... Dolomite
ep ..... Epidote
▲ fel ..... Feldspar
fl ..... Fluorite (flurospar)
fu. ..... Fuchsite
gn. ..... Galena
▲ gt. ..... Garnet
goe ..... Goethite
Au ..... Gold
gf ..... Graphite

gl ..... Gravel
gyp ..... Gypsum
hem ..... Hematite
Fe ..... Iron
IF ..... Iron Formation
jas ..... Jasper
ky ..... Kyanite
Pb ..... Lead
lim ..... Limonite
Li ..... Lithium
mgst ..... Magnesite
mag ..... Magnetite
mc ..... Malachite
Mn ..... Manganese
mb ..... Marble
mar ..... Marcasite
ma ..... Marl
▲ mi ..... Mica
mo ..... Molybdenite
Mo ..... Molybdenum
mon ..... Monazite
ne .... Nephelite (nepheline)
Ni ..... Nickel
Nb ..... Niobium
Pd ..... Palladium
pent ..... Pentlandite
Pt ..... Platinum
▲ py ..... Pyrite
pyl ..... Pyrochlore
▲ po ..... Pyrrhotite
q ..... Quartz
qcv .. Quartz carbonate vein

ra ..... Radioactive minerals
RE ..... Rare Earths
sd ..... Sand
sgl ..... Sand and gravel
ss ..... Sandstone
scap ..... Scapolite
shee ..... Scheelite
serp ..... Serpentine
sh ..... Shale
sid ..... Siderite
si ..... Silica
Ag ..... Silver
sl ..... Slate
sm ..... Smaltite
sod ..... Sodalite
spec ..... Specularite
sp ..... Sphalerite
spd ..... Spodumene
s ..... Sulphides
talc ..... Talc
Te ..... Tellurium
th ..... Thorite
Th ..... Thorium
ti ..... Titanite
Ti ..... Titanium
tour ..... Tourmaline
W ..... Tungsten
uran ..... Uraninite
U ..... Uranium
verm ..... Vermiculite
Zn ..... Zinc
zr ..... Zircon

ADDITIONS

*

▲ Solid triangles indicate metal and mineral occurrences shown on the accompanying maps.

CLELAND TOWNSHIP

MINERAL OCCURRENCES

Ref. Letter on Map	(see Exploration Data Map) Name(s)	Mineralization	REFERENCES IN SMDR-Source Mineral Deposit Record MDC-Mineral Deposits Circular, OGS IMR-Industrial Mineral Report, OGS MDI-Mineral Deposit Inventory NMI-National Mineral Inventory	Additional References and/or Remarks
A	Weisman Feldspar	fel, mi	MDIR S0284 IMC 3, p.13	Fel 3 GR116, pp.133-134, Map 2271 *see N-1
B	Elbow Creek & Wanapitei River Junction Deposit or Pelto, Oscar	fel, mi	IMC 3, p.13	Fel 2 GR116, p.134, Map 2271 *see N-2
C	Wanup North	fel,mi,gt	MDIR S285	GR116, p.134, Map 2271 *see N-3
D	Cleland Township Occurrence	py, po	--	GR116, p.129, Map 2271 *see N-4

TYPE OF WORK

(see Files Index Map)

EXPLORATION FILES

Numbers below represent the year in which the work was done; e.g., 68 for 1968

Ref. No. on Map	COMPANY/AUTHOR (file number)	GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETIC	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETIC	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATION	SELF POTENTIAL	RESISTIVITY	OTHER DATA IN THIS FILE, OR FOOTNOTES

SEE PAGE 14-1...NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

DRILLHOLE SUMMARY

Drilling Location Number on Map	(see Exploration Data Map) Company Name (file number)	Company Drillhole Number	Date Drilled	Bearing Azimuth	Initial Dip of Hole	Thickness of Overburden	Total Length of Hole	Mineralization Noted in Log	Assay Data Included for

● —— indicates core stored at Drill Core Library

AIRBORNE GEOPHYSICAL SURVEY DATA

Number on File Index Map(s)	— by — for — year	Type of Survey	Flight Altitude	Flight Line Direction	Flight Line Spacing

GEOCHEMICAL SURVEY DATA

(see Exploration Data Map)

Map Sample Site Reference Number	Type of Survey	Analysis For	By	Reference

GEOCHRONOLOGY DATA – AGE DATING

Site No. on Map	Method	Material	Reference	Result

AERIAL PHOTOS; MOSAICS; IMAGERY

The following items are available for inspection at the Resident Geologists Office:

(a) Aerial Photographs:

(b) Photomosaics:

(c) Satellite Imagery:

TOPOGRAPHIC MAPS (selected)

scale	year	name and/or number	by
1:50,000	1975	Coniston Sheet, 41 I/7	EMR
1:100,000	1980	NOEGTS Data Base Map, Sudbury, Map 5003 NOEGT Study 100, Sudbury	OGS, Gartner, J.F.
1:1,200,000	1987	Surficial Geology of Northern Ontario, Map 2518	OGS, Sado, E.V. and Carswell, B.F.

NEWSPAPER CLIPPINGS FILE (selected)

PAPER	DATE	PAGE	"ARTICLE HEADLINE" OR COMPANY AND/OR SUBJECT

OGS/ODM GENERAL INDEX SEARCH

Words Searched:

Cleland Township
Cross, D.H.
Elbow Creek
Felspar
Mica
Pelto, Oscar
Wanapitei River
Wanup North
Weisman Feldspar

Index Volume	Listing:	Report Volume	Part	Page
2	Weisman Felspar Mine, Cleland Tp.			
	Leased	34	1	66
	Shipments	34	1	79
2	Weisman Felspar Co.			
	Feldspar mg., Cleland Tp.	32	6	27
	Property sold to A.L. Kemp	33	7	21
8	Cleland Stock			
	Petrography			
	Cleland and Dill Tps., Sudbury Dist.	GR116		71
8	Cleland Tp., Sudbury Dist.	GR116		133-134
	Feldspar/mica			
	Geology of the Burwash area	GR116		
8	Pelto, Oscar			
	Cleland Tp., Sudbury Dist.			
	mining property, report on	GR116		134
8	Weisman Feldspar Co.			
	Cleland Tp., Sudbury Dist.			
	mining property, report on	GR116		133-134

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Brocoum, S.J. and Dalziel, I.W.	1974	The Sudbury Basin, the Southern Province, the Grenville Front and the Penokean Orogeny	GSA Bull.85(4)	pp.1571-1580
Card, K.D. and Lumbers, S.B.	1974-75	Sudbury-Cobalt Geological Compilation (revised)	OGS Map 2361	1"=4 mi.
Dressler, B.O.	1983	Sudbury Mining Area, Eastern Part	OGS Map P.2603	1:50,000
Gupta, V.K.	1981	Bouguer Gravity and Generalized Geological Map, Sudbury-Onaping Lake Area	OGS Map P.2482	1:100,000
Henderson, J.R.	1967	Structural and Petrographic Relations Across the Grenville Province-Southern Province Boundary, Sudbury, Ontario. Ph.D., McMaster University	Sudbury Theses File	
Hewitt, D.F.	1952	Feldspar in Ontario	IMC 3	p.13
Latour, T.E.	1981	Metamorphism and Geothermometry near Coniston: a Clue to the Tectonic Evolution of the Grenville Front	CJES Vol.18	pp.884-898
Lumbers, S.B.	1975	Burwash Area	ODM Map 2271	1"=2 mi.
	1967	Burwash Sheet	ODM Map P.415	1"=2 mi.
	1975	Geology of the Burwash Area	GR116	
ODM-GSC	1965	Aeromagnetic Map-Coniston	Map 1510G	1"=1 mi.
	1965	Aeromagnetic Map-Sudbury Sheet	Map 7067G	1"=4 mi.
Springer, J.	1978	Ontario Mineral Potential, Southern Part of the Sudbury Sheet	OGS Map P.1511	1:250,000

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Thomson, J.E.	1960	Uranium and Thorium Deposits at the Base of the Huronian System in the District of Sudbury	GR1	
Vos, M.A., Smith, B.A., Stevenato, R.J.	1981	Industrial Minerals of the Sudbury Area	OFR 5329	

Note No.	NOTES
N-1	Weisman Feldspar During 1922-24, 20 cars of feldspar were shipped from the Weisman Feldspar Property. (ref. GR116, p.134)
N-2	Elbow Creek....Pelto, Oscar In 1928, one carload of feldspar was shipped from this property by an unknown party. Oscar Pelto reworked the deposit in 1935-36 and 4 carloads of feldspar and mica were shipped from the deposit.
N-3	Wanup North A pegmatite dike has been exposed on the side of a rocky ridge and has been explored by a shallow pit
N-4	Cleland Township Occurrence According to D.H. Cross (property owner), 2 shafts were put down on this deposit in 1922 (95' & 35'). The exploration shafts were sunk to search for sulphide mineralization by an unknown party.

ADDENDA

CONVERSION FACTORS

Conversion from SI to Imperial			Conversion from Imperial to SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
		LENGTH			
1 mm	0.039 37	inches	1 inch	25.4	mm
1 cm	0.393 70	inches	1 inch	2.54	cm
1 m	3.280 84	feet	1 foot	0.304 8	m
1 m	0.049 709 7	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	1.609 344	km
		AREA			
1 cm^2	0.155 0	square inches	1 square inch	6.451 6	cm^2
1 m^2	10.763 9	square feet	1 square foot	0.092 903 04	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
		VOLUME			
1 cm^3	0.061 02	cubic inches	1 cubic inch	16.387 064	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	0.764 555	m^3
		CAPACITY			
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	4.546 090	L
		MASS			
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	31.103 476 8	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	0.453 592 37	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	907.184 74	kg
1 t	1.102 311	tons (short)	1 ton (short)	0.907 184 74	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	1016.046 908 8	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	1.016 046 908 8	t
		CONCENTRATION			
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm).

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in cooperation with the Coal Association of Canada.

For further information please contact:

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200 Brady Street
6th Floor
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MAP LEGENDS

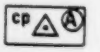
A. FILES INDEX MAP

FILE AREAS **See pages 4-1,2 .... of text**

- ☐ Reference number is always inside work area outlined. See listing in text pages.
- ☐ Small area of exploration data
- ☐ File covers whole township or area
- ☐

B. EXPLORATION DATA MAP

MINERAL OCCURRENCES: See pages 3-1,2__ of text

- ■ Mineral occurrence at surface, with reference letter
- ■ Mineral occurrence with shaft, depth given with reference letter
- ☐ Mineral occurrence reported but exact location uncertain, with reference letter
- ☐ Mineralized float with reference letter
- ☐  Mineral occurrence encountered in drilling, with reference letter
- ☐

DRILLHOLES: See pages 5-1,2__ of text

- ☐ Location of single drillhole, with reference number
- ☐ Location of group of closely spaced drillholes, with reference number
- ☐ Drillhole, exact location uncertain, with reference number
- ☐ Property with underground drillholes in this general area, with reference number
- ☐ Property with drillholes which have not been plotted on map, with reference number
- ☐ Reverse circulation drillhole; churn drilling, with reference number
- ☐

GEOCHEMICAL: See pages 7-1,2....of text

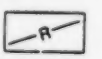
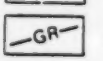
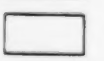
- ☐ Geochemical sample site, with reference number
- ☐ Area of geochemical sampling, with reference number
- ☐

GEOPHYSICAL ANOMALIES

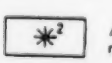
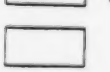
Airborne Surveys: See pages 6-1,2__ of text

- ☐ Airborne magnetic anomaly
- ☐ Airborne electromagnetic anomaly Length of anomaly along flight line
- ☐ Airborne electromagnetic anomaly Location of anomaly along flight line
- ☐ Airborne electromagnetic anomaly Conductor axis: definite, probable, possible
- ☐ Airborne electromagnetic anomaly Conductor axis: Location of flight lines uncertain
- ☐ Airborne radiometric anomaly

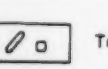
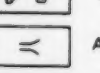
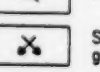
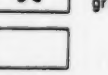
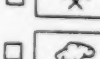
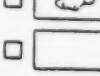
Ground Surveys

- ☐ Ground magnetic anomaly
- ☐ Ground electromagnetic anomaly (VL - Vertical loop; HL - Horizontal loop VLF - Very low freq.; Turam; JEM - Crone Em - 16)
- ☐ Ground radiometric anomaly
- ☐ Induced polarization anomaly
- ☐ Self potential anomaly
- ☐ Audio-frequency magnetic anomaly (total intensity)
- ☐  Resistivity anomaly
- ☐  Gravity anomaly
- ☐ 

GEOCHRONOLOGICAL DATA: See page 8 of text

- ☐  Age dating material sampling site, with reference number
- ☐ 

MISCELLANEOUS DATA

- ■  Trenching, pit
- ☐  Adit
- ☐  Sand and/or gravel pit
- ☐ 
- ☐ Rock quarry
- ☐  Open pit
- ☐ 

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OMISES